APPENDICIES

A. AFIS LEVY HISTORY AND EVOLUTION

First AFIS Levy (1987-1990)

In 1986, the voters of King County approved funding of an Automated Fingerprint Identification System (AFIS). King County residents agreed to levy 2.5 cents per $1,000 of assessed value of taxable property located within King County. The focus of this levy was the purchase and maintenance of the AFIS Computer. It was determined that the King County Sheriff's Office (KCSO) would house the Central Site computer equipment. The KCSO AFIS Section was responsible for searching crime scene latent prints and entering all ten-print cards received from unincorporated King County and all of the suburban jurisdictions into the AFIS Database at the Central Site. The Seattle Police Department (SPD) AFIS Section was responsible for the City of Seattle latent and ten-print work, which they would enter into the AFIS Central Site Database through remote workstations located at SPD.

Although all KCSO and SPD Identification staff used the AFIS equipment, salaries, and benefits for only three latent print examiners (two for KCSO and one for SPD) were funded through the first levy period.

The primary goal of the first levy was to give all police departments within King County a tool to identify perpetrators of serious crimes by matching fingerprints retrieved from crime scenes to known prints stored in the AFIS Database. The system was implemented in April of 1988. In the three remaining years of the levy, KCSO and SPD staff matched 1,208 crime scene latent prints to existing prints and potential suspect names in the AFIS Database. Very few of these latent hits would have been made without AFIS.

Actual Case Story from the first levy: The City of Auburn had been having a rash of commercial burglaries. Over 100 commercial burglaries and nine months later, one latent print from a commercial burglary was submitted to the KCSO Latent Print Unit. The latent print was searched against the newly implemented Regional AFIS Database, and a match was made to a juvenile fingerprint card. Auburn police officers were notified of the identification. The juvenile was placed under surveillance and that very evening committed a commercial burglary. After being caught in the act, the youth confessed that he had committed many others. Officers drove to the locations where over 100 previous commercial burglaries had been committed. Seventy-five of the cases were cleared and of the remaining uncleared cases, the youth couldn't remember if he had burglarized the other establishments or not because there had been so many.

During this levy, it was readily apparent that AFIS was a tremendous crime-fighting tool. Problems also became apparent. The first levy assumed that computerization would save staff time. However, the addition of the inked fingerprint cards from suburban jurisdictions increased the KCSO Ten-Print Unit's workload 144%. No additional staff was funded to deal with this significant backlog. Additionally, it was found that on average, only 60% of the King County Department of Adult Detention inmates were being fingerprinted when they were booked into the facility. Because many of these

fingerprints were of poor quality, they were degrading the AFIS Database.

Second AFIS Levy (1991-1995)

The focus of the second AFIS levy, therefore, became staffing. The goals of the second levy were to:

1) Fingerprint all inmates in the King County Jail;
2) Determine the identity of all inmates within seven hours of booking to ensure that inmates would not be released with outstanding warrants;
3) Search all ten-prints received from the suburban jurisdictions the same day received;
4) Maintain a 30-day turnaround from receipt of crime scene latent prints to AFIS search and reporting of the results; and,
5) Increase training of police officers in the processing and handling of latent prints.

The second AFIS Levy was approved by King County voters in the fall of 1990. The rate was lowered from 2.5 cents to 2 cents per $1,000 of assessed valuation of taxable property within the borders of King County. This lower rate was the result of a remaining balance of $3,000,000 from the first levy and the completion of computer equipment purchases in the first levy so that no significant new equipment was required in the second levy.

During this period, the King County Regional AFIS Program created a Jail Identification Unit. While the physical location of the Jail Identification Unit is in the King County Jail's Intake and Release areas, the staff reports to the KCSO AFIS Section. This Unit is staffed 24 hours a day, seven days a week. The quality of fingerprints received from this Unit has increased the quality of the King County Regional AFIS Database significantly.

The KCSO and SPD Ten-Print Units were expanded to meet the new workloads, reduce backlogs, and to meet the program objective of identifying all inmates within seven hours of booking. These Units are staffed 24 hours a day, seven days a week. During the first half of this levy period, the KCSO Ten-Print Unit was able to eliminate a backlog of 20,000 fingerprint cards.

The KCSO Latent Print Unit's staffing was increased in phases from five to eight Latent Print Examiners during 1992 and 1993. After the new Examiners came on board, a nine-month backlog of AFIS-quality latent cases was decreased. A more acceptable turnaround time of 30 days to complete an AFIS-quality latent case to court readiness was finally attained.

However, in the last four months of 1994, the KCSO Latent Print Unit experienced a 58% increase in crime scene call outs and a 78% increase in the number of hours spent in court. This trend continued into 1995. These significant increases in demand for staff time, coupled with temporary evidence processing lab site that is five miles from the Central AFIS Site at the County Courthouse, caused the turnaround time to fluctuate

between 30 and 45 days during 1995.

Actual Case Story: The AFIS Jail Identification Unit became a 24-hour, 7-day a week operation in March of 1992. In May of that year, an Identification Technician began to fingerprint an inmate. There was a look of shock on the inmate's face as he asked, "Since when did you guys start fingerprinting everybody?" The Technician answered, "Since March of this year." The inmate went on to tell the Technician that he had been in the King County Jail ten times before, each time giving a different name, and had never been fingerprinted. He then told the Technician his real name. Since 1992 there has been a steady decrease in the number of people found to be lying about their identities. Technicians and Officers have been told by inmates that you just can't get away with lying about your name in the King County Jail, because "they" will just find out anyway.

Third AFIS Levy (1996-2000)

As with the first levy, the successes of the second levy masked significant gaps and problems in provision of AFIS Services. The Technical Subcommittee, which was charged with making recommendations for the 1996-2000 levy, looked behind the statistics and identified many concerns, including:

- Need to capture additional prints: Many juvenile offenders booked into the Juvenile Detention Center were not fingerprinted. Similarly, persons convicted of driving under the influence of alcohol or controlled substances were not printed if they were booked directly into the North Rehabilitation Center to serve their sentence. With the 1997 opening of the Regional Justice Center in Kent, additional staff would be needed to fingerprint persons booked into the facility on a 24 hour a day, seven days a week basis.

- Crime Scene Prints: There remained significant barriers to police agencies using AFIS Services for identifying potential suspects from crime scene fingerprints. Lengthy processing times for crime scene prints discouraged police officers from taking prints from crime scenes and submitting them to the Latent Print Units. Despite the training that occurred during the previous levy, many officers still had not been trained, so many prints submitted were not of AFIS quality.

- Investment in Technology: The computer initially purchased for the Regional AFIS Program was expected to become obsolete near the end of the levy period, and it was expected that upgrade of the computer and operating system would be needed during the latter years of the levy period. In addition, the Committee recommended purchase of Live Scan technology for remote electronic taking and searching of fingerprints. This Live Scan technology, coupled with the "store and forward" capability anticipated in the AFIS 21 Computer upgrade, was expected to allow for reduction of duplication that occurred within several aspects of the AFIS services.

- Funding Levels: The Technical Subcommittee found that the Regional AFIS Program was under-funded even at the existing staffing levels, requiring subsidy by both King County and Seattle.

- Access and Service for Suburban Police Agencies: The Technical Subcommittee determined that a concerted effort should be made to increase access and service for suburban police agencies through increased training, establishment of a technology "grants" fund, and establishment of a Regional AFIS Advisory Committee.

The County Council ultimately placed before the voters a proposal to fund the King County Regional AFIS Program at a rate of 6.65 cents per $1,000 of assessed valuation. The AFIS package included funding to address all of the above issues as shown in the following table.

Table 1, Estimate of 1996-2000 Levy Expenditures and Rate Impact

Item	5-Year Total Cost	Rate per $1,000 Assessed Valuation
Jail Print Taking (King County Jail, RJC)	$7,196,458	1.08 cents
Juvenile Print Taking	$290,163	0.04 cents
Print Persons Reporting to NRF	$203,975	0.03 cents
Training Coordinator/Suburban Liaison Position	$874,482	0.13 cents
Latent Examiners	$11,314,981	1.69 cents
Supervision	$3,691,609	0.55 cents
Ten-Print Unit	$11,052,362	1.65 cents
Supplies, Equipment and Maintenance and Operations	$9,307,025	1.41 cents
Sub Total	**$43,931,055**	**6.58 cents**

Additional AFIS Improvements

AFIS Technology Grant Fund (Live Scan)	$1,325,000	0.20 cents
Additional Latent Print Examiners	$1,035,023	0.14 cents
Sub Total	**$2,360,023**	**0.34 cents**
Miscellaneous Salary and Benefit Adjustments, and Other Technical Changes	($1,709,489)	-0.27 cents
GRAND TOTAL	**$44,581,589**	**6.65 cents**

Fourth AFIS Levy (2001-2005)

The fourth AFIS Levy faced the restrictions on annual rates of growth as required by Initiative 747. Initiative 747 was approved by voters in 2001, and it capped the rate of growth on the revenue to 1% growth plus the prior year rate for new construction.

The fourth levy continued the AFIS implementation of the previous levy and supported several incremental enhancements to the program:

- Continuation of Status Quo Services (five-year total cost of $50,249,711)

- Staffing additions to handle low range estimates of increased workload (five-year total of $2,359,822 and 11 new positions)
- Completion of Live Scan implementation by purchasing and implementing an additional seven Capture Stations beyond the 22 funded for 2000 (one-time costs of $498,400). Ultimately ten Capture Stations were purchased for the same cost through negotiation with the vendor.
- Establishment of print taking at Juvenile Court for juvenile offenders who are never booked into detention. (five-year total cost of $557,677 and two new positions)
- A target ending fund balance of $800,000

Estimate of 2001-2005 Levy Expenditures and Rate Impact

Item	Five-Year Total
Status Quo Services	$50,249,711
Additional Live-Scan Capture Stations	$498,400
Juvenile Court Print Taking	$557,677
Workload Driven Additions	$2,359,822
Target Fund Balance	$800,000
Total	**$54,465,610**
2001 Levy Rate / cents per $1,000	**5.784**

Through prudent fiscal management, a fund balance has accumulated over the years. This accumulated AFIS fund balance at the end of the 2001-2005 levy cycle will allow the fund to continue operations in 2006 without an additional property tax levy in 2006. This plan requires AFIS Program management to carefully manage and monitor AFIS fund expenditures in 2006 in order to fund 2006 expenditures without any new levy funds.

In the following real life stories, it is important to note that it does not matter where the incident occurred, because frankly, criminals nor terrorists care about boundaries, whether they be cities, counties, states, or nations:

Kirkland: A woman is brought into the Kirkland Police Department. She is known to have Russian Mafia ties. She is taken to the Live Scan Capture Station where she is fingerprinted, and the record is electronically transmitted to the King County Regional AFIS, on to Washington State Patrol, and to the Federal Bureau of Investigation. Her fingerprints matched those of a woman on the Homeland Security "Terrorist Watch List" as being a known member of Al Queda. Both the FBI and Interpol wanted to know more about this woman's movements while she had been in this area.

Multiple Cities and King County: Ten Home Invasion Robberies crossed King County boundaries into multiple cities. Fathers, mothers and children were tied up and held at gunpoint for up to an hour. All feared for their lives as they watched their homes being ransacked. Crime scene latent prints were searched on the King County Regional AFIS, which linked five suspects to five of the ten terrifying crimes. Forensic evidence, such as the latent prints and DNA helped the detectives and prosecution team to charge and

convict all five of these suspects; ending this horrific crime series. Four of the suspects' sentences ranged from 20 years to 65 years. Suspect 1, sentenced to 65 years; Suspect 2, sentenced to 40 years; Suspect 3, sentence to 38 years; Suspect 4, sentenced to 20 years, and, Suspect 5 (the driver), was sentence to 5 years.

Seattle: A Rape/Burglary occurs in West Seattle. A woman is awakened from her sleep by being punched in the face. She is raped orally and vaginally as her three-month old child lays next to her in bed. The suspect escapes. Five days later, a Burglary in West Seattle takes place one block from the first incident. The suspect opens a closed bedroom window and enters the apartment. He flees when the occupants start screaming. Two days later there is an Attempted Rape/Burglary/Assault, again in the same West Seattle area. The suspect forces a locked apartment window open, enters, and attacks a sleeping woman, who screams. The next unit neighbor, enters her apartment in response to her screams, and confronts the armed suspect. A fight ensues and the Good Samaritan is stabbed three times before the suspect escapes. A Latent Print Examiner located latent prints at the latest crime scene. The latent is searched through the King County Regional AFIS with no success. Through our Regional AFIS networking capabilities to the Western Identification Network, a match was made to a suspect who had criminal history in Sonoma County, California for five similar incidents including Rape, Child molestation, Burglary and Assault. There was no criminal history in either King County or the State of Washington. Officers, acting on a tip from a citizen, arrested the suspect two blocks from the crime scenes locations. The threat to the community is over.

B. AFIS ADVISORY COMMITTEE MEMBERSHIP

AAC Committee Chair: Chief Rick Kieffer, Normandy Park Police Department

AAC Committee Vice-Chair: Lt. Marc Olson, Identification & Evidence Unit, Seattle Police Department

Members:

Don Berard, Budget Supervisor, Seattle Police Department

Greg Doss, Strategic Advisor, City of Seattle, Department of Finance

Asst. Chief Linda Pierce, Seattle Police Department

Penny Bartley, Auxiliary Services Manager, Renton Police Department

Capt. William Ferguson, Bellevue Police Department

Cathy Schrock, Support Service Manager, Federal Way Police Department

Ryan Bayne, Director of Intergovernmental Relations, King County Executive Office

Clif Curry, Senior Legislative Analyst, King County Council

Marilyn Nault, Regional AFIS Manager, King County Sheriff's Office

Chief Denise Turner, King County Sheriff's Office

C. AFIS TECHNICAL SUBCOMMITTEE MEMBERSHIP

John Amos, Budget Supervisor, King County Office of Management & Budget
Don Berard, Budget Supervisor, Seattle Police Department
Clif Curry, Senior Legislative Analyst, King County Council
Roger Enders, Jail Manager, Issaquah Police Department
Trever Esko, Business Systems Analyst, King County Office of Information Resources & Management
Major William Hayes, King County Adult & Juvenile Detention
Cathy Grindle, System Manager, King County District Court
Mike Hirman, Jail Commander, Auburn Police Department
Chief Rick Kieffer, Normandy Park Police Department
Tim Longley, LAN/Information Systems Manager, King County Adult & Juvenile Detention
Captain Gene Markle, Kirkland Police Department
Barbara Miner, Director/Superior Court Clerk, King County Judicial Administration
Marilyn Nault, Regional AFIS Manager, King County Sheriff's Office
Carl Nicoll, Crime Lab Manager, Bellevue Police Department
Lieutenant Marc Olson, CSI, Identification & Photo Lab, Seattle Police Department
John Slomnicki, LAN/Communications Administrator, King County Correctional Facility
Deanna Strom, Program Analyst, King County Correctional Facility
Pat Presson, Finance Manager, King County Adult & Juvenile Detention
Nick Zajchowski, Policy & Program Analyst, Municipal Court of Seattle

D. OVERVIEW OF THE WORK OF THE TECHNICAL SUBCOMMITEE

In November 2005, the AFIS Advisory Committee (AAC) commissioned the Technical Subcommittee (TSC) to review the operations of the Regional AFIS Program, and to recommend to the AAC a set of prioritized programs and enhancements to meet emerging community needs and current standards for the collection and identification of suspects in King County.

The TSC met a total of nine times over the period from December 2005 through March 2006. The TSC reviewed in detail each of the proposed initiatives item for the Regional AFIS Program, challenging assumptions, timing, financial implications, and relevance to the AFIS system. The TSC put forth a set of enhancements to status quo, categorized by funding ranking, to the AAC for its final recommendation.

The following pages contain the outcome of the TSC. The Summary of Themes and the Consensus for Funding Survey were the final products. One should not be read without the other, as together, they represent the voice of each member who chose to participate in the final ranking and a summary of the comments received. The Consensus for Funding Survey shows down the left side the final categorization of the enhancements, and across the top the survey of each participating member. The final column represents an average of the participant rankings. The Summary of Themes was approved by the TSC as being representative of the general thinking of the group and gives some insight into why a particular enhancement was ranked as it was.

Overall, there was only one enhancement that received a “1” from all participants, that of the New Generation AFIS.

Technical Subcommittee Summary of Themes

(This is not a standalone document; it is to be read in conjunction with the Consensus for Funding Survey on page 54)

CATEGORY 1

New Generation AFIS

- ☑ The essential foundation to the future capability, operation and success of the Regional AFIS Program.
- ☑ Critical for improving service for future AFIS users

CATEGORY 2 (in alpha order)

Live Scan High Definition Upgrade

- ☑ Will make maximum use of new AFIS Computer and improve Latent Print matches and comparisons
- ☑ Necessary for improvement in print quality.
- ☑ Better print resolution will increase hits. .

Live Scan Increase – Criminal (with Palms)

- ☑ Closes gaps in service area. Complete the regional distribution of Live Scan Capture Stations.
- ☑ Widens the database and potentially solves crime throughout the region
- ☑ Will assist in cold cases and future cases. Important for public safety

Palm Activation and Minimum Conversion (Master card)

- ☑ Future of AFIS identifications. Will result in more hits and crimes solved. Potential to increase hit rates in a significant way.
- ☑ Aligns with new AFIS capabilities.

Staffing to Support Increased Workload

- ☑ This is a regional program. Need additional staff to keep up with progress. Increased awareness continues to bring increased number of fingerprints which will need more staff to process/identify
- ☑ Question about the need for this level of increase.

Staffing to Support Palm Search Capabilities

- ☑ Believe palm capabilities will require more staff.
- ☑ This is just an estimate. Proceed with the "increased workload staffing" with some success until known staffing related to palms is available.

CATEGORY 3 (in alpha order)

Mobile Identification Central (2-3 units proof of concept)

- ☑ It is the responsibility of the Regional AFIS Program to provide this infrastructure to KC agencies.
- ☑ Important to provide capability to agencies that want to use it and require access to the AFIS database.
- ☑ Luxury item that should only be added if funds available.

Quick Print Capture name change to "Court Identification Study"– Feasibility Study

- ☑ This supports the Regional AFIS Program's goal of accurate and consistent criminal history reporting and fills a critical gap (particularly important with respect to misdemeanor convictions which are not always fingerprinted at arrest, and, therefore, do not appear on the official "rap sheet.").
- ☑ Nice to have, but only if funding available.
- ☑ Rename "Court Identification Study" or similar.

Staffing –AFIS Photographers to Support Latent Processing

- ☑ Latent prints are lost due to inadequate turn-around time with photography. Need to photograph latent prints before lose them, but not take precedence over some other enhancements.
- ☑ Fund work generated by AFIS activities with AFIS funds.
- ☑ Can be supported with other funds as is done currently.
- ☑ Better funded as a contract account paid to the Photo Units for service, which they could then use for staff or equipment as needed to manage volume.

CATEGORY 4 (in alpha order)

Completed Palm File Conversion

- ☑ Needed for complete database for latent print matches and comparisons.
- ☑ May be negotiated into contract. Nice only if funds are available.
- ☑ Can be converted by staff, day-forward as time allows. Build a duplicate database with the Frequent Flyers. Prioritize cards based on crime type.

Live Scan Increase – Applicants

- ☑ Nice, but not part of AFIS critical mission.
- ☑ Nice only if funds available.
- ☑ Agencies should purchase and maintain their own applicant units.

Quick Print Capture – Pilot Projects (other funding options/vendor testing)

- ☑ Doesn't make sense to do the study w/no funding to close gaps as they are identified.
- ☑ Small investment for potentially very large payoff in terms of filling criminal history gaps, a very important AFIS mission.
- ☑ Nice only if funds available.

CATEGORY 5

Mobile Identification – Pilot Projects (50 units)

- ☑ Encourage other funding options. Funding may be sought through grants, using homeland security, identity theft, officer safety, and lack of proper officer staffing (i.e. keeping cops on the streets) as a basis. Vendor POC may be an option. Agencies should be able to purchase from any vendor.
- ☑ Not certain of regional responsibility to fund this for local jurisdictions that want to use it. At 50 units, is it an implementation plan or a pilot program? Complex both technically and from a business perspective due to the variety of jurisdictions involved and their unique technical configurations.

Consensus For Funding Survey From The Technical Subcommittee

See Summary of Themes for additional comments.

	Potential Enhancement	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	Overall Category
1	New Generation AFIS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**1**
2	Live Scan High Definition Upgrade	2	1	1	2	3	3	1	1	1	1	1	1	1	2	3	3	2	**2**
	Live Scan Increase – Criminal (with Palms)	1	1	1	3	1	1	2	1	3	1	1	1	1	1	1	2	1	**2**
	Palm Activation and Minimum Conversion (Master card)	1	1	2	1	1	1	1	1	2	1	1	1	1	2	1	1	1	**2**
	Staffing to Support Increased Workload	1	1	1	2	1	1	1	1	1	4	1	3	1	2	1	1	1	**2**
	Staffing to Support Palm Search Capabilities	1	2	2	3	4	1	2	1	3	1	1	1	3	3	1	1	2	**2**
3	Court Identification – Feasibility Study	2	2	2	2	5	5	4	1	1	5	3	3	3	1	3	2	2	**3**
	Mobile ID Central (2-3 units proof of concept)	2	2	3	2	4	5	2	1	2	5	3	5	1	1	4	3	4	**3**
	Staffing –AFIS Photographer to Support Latent Processing	3	1	2	2	1	2	3	3	5	3	1	1	3	5	5	2	2	**3**
4	Completed Palm File Conversion	5	1	5	5	4	1	5	5	5	2	1	5	5	5	1	5	4	**4**
	Court Identification – Pilot Projects	2	4	3	2	4	5	5	1	1	5	3	3	5	3	3	5	4	**4**
	Live Scan Increase – Applicants	3	4	4	4	5	3	4	5	5	3	3	3	5	5	3	5	3	**4**
5	Mobile ID – Pilot Projects (50 Units)[22]	2	4	4	4	5	3	4	3	4	5	3	5	5	5	5	3	5	**5**

Overall Scoring Process:

Each respondent ranked the potential enhancements in order of consensus for funding. The ranking was done based on a numerical scale between 1-5 (1=High, 5=Low). The average of the ranking scores was taken to create the overall ranking. The enhancements are displayed based on overall ranking. Within each overall category, the enhancements are displayed in alphabetical order.

[22] The Technical Sub Committee reviewed the pilot project with an assumption of 50 units. The TSC felt strongly that (quoted from the Summary of Themes from TSC – see appendix D, page 51: "Not certain of regional responsibility to fund this for local jurisdictions that want to use it. At 50 units, is it an implementation plan or a pilot program? Complex both technically and from a business perspective due to the variety of jurisdictions involved and their unique technical configurations." The AAC took their comments under advisement and, as a result, reduced the pilot to 10 units.

E. SURVEY OF TEN-PRINT AND LATENT OPERATIONS

Ten Print Service Operations

Agencies Surveyed: Algona Police Department, Auburn Police Department, Bellevue Police Department, Black Diamond Police Department, Bothell Police Department*, Burien (KCSO Pct. 4) (Includes Vashon Island, Clyde Hill Police Department, Des Moines Police Department*, Duvall Police Department, Enumclaw Police Department, Federal Way Police Department, Issaquah Police Department, Kenmore (KCSO Pct. 2) (Includes Woodinville), Kent Correctional Facility, Kent Police Department, Kirkland Police Department, Lake Forest Park Police Department, Maple Valley (KCSO Pct. 3) (Includes Covington, Muckleshoot Tribe, Newcastle, and Towne of Beaux Arts Village) *, Medina Police Department, Mercer Island Dept. of Public Safety, Normandy Park Police Department*, Pacific Police Department, Port of Seattle Police Department, Redmond Police Department, Renton Police Department, Sammamish (KCSO Pct. 2) (Includes Skykomish and North Bend), SeaTac (KCSO Pct. 4), Shoreline (KCSO Pct. 5), Snoqualmie Department of Public Safety, Tukwila Police Department, University of WA Police Department

*Although attempts were made to contact these Law Enforcement Agencies, KCSO AFIS Program was unable to speak with them.

In relation to AFIS, are there any gaps in service that you have recognized? What are they?

- Ability to electronically transmit prints to Interpol**
- Difficulty in returning QID information to the original officer
- Make money and grants available to agencies to purchase Live Scan. Small agencies cannot afford the $5000 needed to purchase the system

What is the top thing public and policy makers need to know about AFIS? Why?

- Very beneficial to our agency.
- Great response time, quick ID's extremely helpful.
- Immediate results on QIDs vital, building latent print database.
- Saves taxpayers money by allowing officers to do a cite & release at the precinct instead of having to transport to KCCF or RJC, keeps officers local.
- Makes our job easier; gives our officers an important processing and identification tool that is easy to use.
- Good for identification; good to have it open to all agencies in the county.
- Beneficial for identifying liars.
- Quick ID's, access to database is beneficial.
- Beneficial, especially for uncooperative suspects and identification.

- Agencies are relying more frequently on fingerprints for identification versus name or date of birth; this emphasizes the need for Live Scan.
- Interaction with other agencies regarding information sharing services; capture of information to build databases.
- Great system - very happy with AFIS as a whole, don't want to lose it.
- Wonderful tool!
- Appreciate the rapid response.
- Instant results can mean the difference between life and death.
- Not just for law enforcement; but also for school districts, nursing and daycare applicants. Helpful to have electronic transmission on those.
- Beneficial in ID's and catching liars; database available to make it easier to find a name to go with latent prints.
- Huge benefit in tracking criminals, by providing fast fingerprint database search.

Anything that you, as AFIS users, want to know about AFIS?

- Information flow has been outstanding, much appreciated.
- Potential costs involved.

Are there any other enhancements/changes to AFIS that you feel would be important to pursue in the future?

- Mobile ID (6)
- Live Scan Upgrade (5)
- Live Scan for both Criminal and Applicant (4)
- Applicant Live Scan (3)
- Court Identification (2)

Latent Service Operations

Agencies Surveyed: Auburn Police Department, Bothell Police Department, Des Moines Police Department, Federal Way Police Department, Kent Police Department, Kirkland Police Department, Medina Police Department, Normandy Park Police Department, Pacific Police Department, Redmond Police Department, Renton Police Department, Tukwila Police Department

In relation to AFIS, are there any gaps in service that you have recognized? What are they?

- All items may not get processed due to time constraints. With a very large volume of evidence to process, reports may not go out in a timely manner.
- Officers are unable to obtain the victim elimination prints because of time constraints.
- LPE callout availability for more serious crimes than auto theft.**

- Additional staffing for processing of property crime evidence. Now, most evidence being sent to the processing lab is from major crimes.
- Processing Lab should be conveniently located to aid in the day-to-day operations.

What is the top thing public and policy makers need to know about AFIS? Why?

- The importance of the service the Latent Lab provides. Bothell services would come to a standstill without the Latent Lab; it is a lifesaver.
- Cases don't get solved as quickly as portrayed in the CSI television series. Cannot get fingerprint comparisons immediately, and DNA cannot be evaluated in a day.
- Appreciate the availability of LPE's to go on callouts to process vehicles, possibly involved in more serious crimes than auto theft. DMPD would send more evidence from their property crimes to the processing lab if there were additional staffing. Now, most evidence being sent to the processing lab is from major crimes. DMPD assumes that major crimes and rush cases always take priority.
- The Latent Lab does excellent work, is very responsive, but is understaffed.
- KC Latent Lab provides a necessary service to the agencies in KC that do not have their own latent lab facilities. KC has personnel with specialized training to provide processing and evaluation of latent prints.
- KC Latent Lab is very valuable to small and mid-sized police agencies that do not have the budget to fund their own processing labs. They need to provide these services for victims and citizens. Need to educate the public on how important the passage of the upcoming AFIS Levy is, to maintain current levels of service.
- The Latent Lab examiners and clerical unit have been very responsive to requests. NPPD is amazed at how quickly LL locates cases for them with very little information provided.
- The importance of funding police and fire, and not go to the public for the funding.

Anything that you, as AFIS users, want to know about AFIS?

- Can items for processing be mailed to the downtown courthouse?**
- Operating hours of the latent processing lab for receiving evidence.**
- Tour to understand what officers / LPE's do in order to achieve better understanding of services available.**
- Latent Lab availability for crime scene callouts.**
- Amount and type of evidence received and processed.

Are there any other enhancements/changes to AFIS that you feel would be important to pursue in the future?

- Improved turnaround time (2)
- Clearer reports

- Electronic reports
- Officer training for latent and DNA collection
- LPE training to remain current
- Dedicated counter to receive and return evidence
- Better communication between police agencies and King County

Other Comments:

- In the past, service from WSP in Olympia was faster than King County. In the last six months, the turn around time for reports from King County has vastly improved.
- It's very helpful to have clerks at the processing lab on Mondays and Wednesdays from 0900 to 1300. It used to be hit and miss as to when staff was available to receive evidence.
- The multi-agency Hit Report that is sent out each month by the LCU is very useful. It's helpful to see what other agencies are doing, and see that suspects are crossing jurisdictional lines in committing crimes.
- LPE's are helpful and forthcoming with information. There are helpful illustrations at the lab that highlight numerous procedures. Very happy with fast service the Latent Lab provides.
- The Processing Lab is in a very convenient location for Bothell PD. The Latent Lab is always very responsive to callouts and helpful in any way possible. Very satisfied with the current service.

** These items are being addressed within the existing AFIS Program.

F. LIVE SCAN ELECTRONIC VS INKED FINGERPRINT SUBMITTALS

	Location/Agency	Percent of Total Volume
Live Scan	Auburn Police Department Bellevue Police Department Bothell Police Department Burien (KCSO Pct. 4) Covington (KCSO Pct. 3) Des Moines Police Department Duvall Police Department Federal Way Police Department Issaquah Police Department Kenmore (KCSO Pct. 2) Kent Police Department Kirkland Police Department Lake Forest Park Police Department Maple Valley (KCSO Pct. 3) Mercer Island Dept. of Public Safety Muckleshoot Tribe (KCSO Pct. 3) Newcastle (KCSO Pct. 3) Northbend (KCSO Pct. 2) Port of Seattle Police Department Redmond Police Department Renton Police Department Sammamish SeaTac (KCSO Pct. 4) Seattle Police Department Shoreline (KCSO Pct. 5) Skykomish (KCSO Pct. 2) Town of Beaux Arts Village (KCSO Pct. 3) Tukwila Police Department Woodinville (KCSO Pct. 2)	97%
Inked Prints	Algona Police Department Black Diamond Police Department Clyde Hill Police Department Enumclaw Police Department *(Agency Declined Unit)* Medina Police Department *(Agency Declined Unit)* Normandy Park Police Department Pacific Police Department Snoqualmie Department of Public Safety University of WA Police Department	3%

KC non-Live Scan agencies submit fingerprints via fax when an identity is in question, for a quick response.

Other agencies outside of King County also submit prints on questionable identities via fax. Medical Examiner (fax and ink) submissions are not included in these numbers.

All agencies that applied and were granted a Live Scan agreed to the following: ”All Live Scan Capture Stations that have been installed by the King County Regional AFIS Levy will be shared with any neighboring King County law enforcement agencies and no charge for the use of those devices to other King County agencies will be levied.”

G. LIVE SCAN EQUIPMENT LOCATION – 2005

	Live Scan Equipment Location	Number of Machines
TP600 (end of life units to be replaced in 2007)	Auburn Correctional Facility	1
	Bellevue Police Department	1
	Bothell Police Department	1
	Burien (KCSO Pct. 4)	1
	Des Moines Police Department	1
	Duvall Police Department	1
	Issaquah Police Department	1
	Kenmore (KCSO Pct. 2)	1
	Kent Police Department	1
	King County Courthouse (Applicant)	1
	King County Courthouse (Training)	1
	King County Youth Services Center (Courts)	1
	Kirkland Police Department	1
	Lake Forest Park Police Department	1
	Maple Valley (KCSO Pct. 3)	1
	Mercer Island Dept. of Public Safety	1
	Port of Seattle Police Department	1
	Sammamish (KCSO Pct. 2)	1
	SeaTac (KCSO Pct. 4)	1
	Seattle Police Department (Public Records Unit)	1
	Shoreline (KCSO Pct. 5)	1
	Tukwila Police Department	1
	Total TP600 Live Scan Machines	**22**
TP3800 (installed in 2005)	Bellevue Police Department	1
	Federal Way Police Department	1
	Kent Correctional Facility	1
	King County Correctional Facility	3
	King County Regional Justice Center	2
	King County Youth Services Center	1
	Redmond Police Department	2
	Renton Correctional Facility	1
	Total TP3800 Live Scan Machines	**12**

H. ENHANCEMENTS APPENDICIES

New Generation AFIS
(Dollars in thousands)

6-Year Cost:	$5,835	Timeframe	2007 - 2008
TSC Category	1	AAC Funded Priority	YES

Program Description and Need:
The current AFIS Computer requires replacement in order to increase crime scene latent hit rates as well as increase storage capacity and functionality. Further, any additional features, such as Mobile Identification, Court Identification, Palm Matching, 1000 ppi resolution, or other technological advancements being implemented by other AFIS Sites throughout the nation are dependent on a New Generation AFIS Computer.

The replacement of the current AFIS Computer and its peripheral equipment, which was installed in 1988 and upgraded for Y2K compliance in 1999, would consist of all hardware, software, and maintenance to support the standard Ten-Print and Latent Databases, Matching System, and an Image Archive System. It is also the foundation for further enhancements, and potential realization of higher latent hit rates when implemented. The features of the New Generation AFIS Computer would include:

- **Conversion to Gray Scale:** A New Generation AFIS Computer will allow for the conversion of the remaining binary images (64% of the AFIS Database) to gray scale images. This change is expected to increase AFIS accuracy, due to the more true-to-life appearance of the print. This is the last manual database conversion the King County Regional AFIS Program would ever require.
- **Full Finger & Flat Impression Storage & Matching:** The AFIS Computer used today is capable of storing and matching upon *only the first joint of the finger*, for both ten-print and unsolved latent prints. The New Generation AFIS Computer can also store the plain (non-rolled) impressions of the thumbs and four fingers of each hand that are taken at the same time. In a recent study performed by the FBI and Los Angeles (California) Sheriff's Office, latent hits increased by 13% with the addition of flat impression storage and matching.
- **Increased Capacity:** Database storage capacity would be expanded for growth.
- **Multiple Record Matching & Storage:** Currently, only one full set of fingerprints per individual can be stored and searched upon within the AFIS Database. In the New Generation AFIS Computer, up to five records per individual can be stored and searched on, which could significantly increase the chance of a hit.
- **Higher Resolution of Matching & Storage:** Fingerprints would be electronically stored in the New AFIS Image Archive System at 1000 ppi. Currently, the electronic images are stored at the national standard resolution of 500 ppi, which makes latent comparisons more difficult. The FBI highly recommends capture and storage of fingerprints at 1000 ppi. With the new system, these images will be available for viewing by operators through their PC's, eliminating the need for retrieving, reviewing, and re-filing hard copy fingerprint cards currently used in the comparison process.

- **Four-finger Search:** Instead of using two fingers for a ten-print search, four would be used by the new system. This change would give the system additional information to search on, moving potential fingerprint matches to the top of the candidate list, reducing the Ten-Print Identification Technician's time spent browsing candidate lists, resulting in a more efficient use of time.
- **Modular Design:** The New Generation AFIS Computer will be modular in design and will allow for future enhancements to be easily added, without a full-scale system upgrade, unlike the current system that requires total replacement of major components in order to increase storage or throughput. It will be configured to incorporate electronic palm print storage and matching without extensive programming changes.
- **Universal Workstations & Improved Operability:** With the addition of Universal Workstations, Ten-Print and Latent staff can search the FBI's national Integrated Automated Fingerprint Identification System (IAFIS) and the King County Regional AFIS Database via one workstation rather than two. With improved user interfaces, operators can work faster without losing quality or accuracy. Quality assurance measures that are now being handled manually are built into the new system. Automated ten-print searches would be launched against the Latent Database upon receipt of prints taken of new arrestees.

Impacts on AFIS:
Additional latent and ten-print hits are expected and would be measured, turnaround times of ten-print identifications would improve, and more "liars," would be identified. A New Generation AFIS Computer is essential for the implementation of other technology proposals, such as Palm Storage and Matching, Mobile Identification, and Court Identification. The current system cannot support the infrastructure for these enhancements.

Other Impacts:
Information Technology Services has received a general notification at this point and would be involved in the RFP process, contract negotiations, design phase, and implementation stages. Implementation of a New Generation AFIS would result in additional "hits" and faster response times. The cities have been notified and although minimally impacted, Department of Adult and Juvenile Detention has been notified as well.

Timeline:
This project would be scheduled to begin immediately upon voter approval of the AFIS Levy and the 2007 budget approval process. It is estimated to take approximately two years to complete.

Cost Estimates and Assumptions:
The estimated cost is the midpoint of estimates received from two different AFIS vendors. The estimate includes all hardware, software, and maintenance required to implement a new AFIS as well as a three-year TLT project manager, technical consultant

expertise and contingency reserves of 20% on all labor elements and 10% on all non-labor elements. The estimates were based upon projections of maximum database capacity, specific daily and peak hourly transactions, and expected response times. The estimate assumes refreshment in 2014.

Other alternatives considered:

To reject this New Generation AFIS Package would result in an intermediate upgrade to the existing AFIS Computer. This upgrade would increase some functionality, but would not increase crime scene latent hit rates and would cost between $1.0 and $1.5 million. In addition, the storage capacity would be reached, and no more prints could be registered to the system. The number of latent hits would not be maximized if the first joint of the finger remains the only area to search against and binary images remain in the AFIS Database. Further, no additional features such as Mobile Identification, Court Identification, Palm Matching, or any other technological advancements being implemented by other AFIS Sites throughout the nation, could be added. The current system cannot support the infrastructure for these enhancements.

Live Scan High Definition Upgrade
(Dollars in thousands)

6-Year Cost:	$404	Timeframe	2008
TSC Category	2	AAC Funded Priority	YES

Program Description and Need:
Upgrade all Live Scan Capture Stations to produce images at 1000 pixels per inch (ppi) with High Definition Scanners and capture the first FBI certified 1000 ppi images in King County. The High Definition Scanners are not currently being produced, and the model being described in this document is not expected to be available until late 2007. The change to 1000 ppi image capture capability is a field upgradeable swap-out of the optical sensor deck and application software. The upgrade should take no more than four hours at each site, and can take place during non-peak work hours.

Impact on AFIS:
In many cases, Latent Print Examiners can positively identify a crime scene print that is the size of a pencil eraser. However, when working with such a small area, the clarity of ridge detail becomes even more important. More pixels per inch means more data captured, which enables Latent Print Examiners to identify fingerprints left at crime scenes and increases the likelihood of identifying a suspect.

This upgrade will improve the quality of the images stored in the AFIS Image Archive System to 1000 ppi. The FBI has recommended capturing fingerprint images at 1000 ppi for many years, although it has not been mandatory for submission. Planning for 1000 ppi will assure that the King County Regional AFIS Program is compliant with any new federal standards.

Other Impacts:
The higher image quality would only be cost effective if the AFIS Image Archive System was upgraded to store 1000 ppi images. This option is being considered in the New Generation AFIS Decision Package. It will also increase file size and the need for additional storage. Storage options are being addressed with the implementation of the New Generation AFIS.

At 1000 ppi, the files will be approximately four times greater than the current size. Transmission time of the entire record from the suburban agencies may increase by up to one or two minutes per record. This increase should be transparent to the user, and is small enough to have virtually no effect on the Ten-Print Unit's ability to identify subjects before their release from custody. The only anticipated impact to other agencies would be a short system downtime while the upgrade is performed.

Timeline:
The field upgrade to all existing Live Scan Capture Stations would occur in 2008.

Cost Estimates and Assumptions:

This estimate is based on an informal estimate provided by the Live Scan manufacturer to retrofit the current 34 Capture Stations throughout King County.

Live Scan Increase – Criminal Capture Stations
(Dollars in thousands)

6-Year Cost:	$297	Timeframe	2007 - 2008
TSC Category	2	AAC Funded Priority	YES

Program Description and Need:
In the 1995 AFIS Levy, the decision was made to provide Live Scan throughout King County. The King County Regional AFIS Program has surveyed its customers and reviewed previous requests, and found that there are still areas of the county that would benefit from the use of Live Scan technology. The allocation of full size Capture Stations are based on the estimated volume of potential fingerprints, the location of the facility and their access to another unit, the type of facility (i.e. jail or holding area), and whether the Capture Station would be used for criminal processing or applicant processing. Priority is given to the potential capture of criminal records over applicant.

Allocate funding for the purchase and maintenance of additional Criminal Live Scan Capture Stations to capture additional criminal prints throughout the County proposed for the following agencies:

- Enumclaw Jail – Previous space issues preventing deployment have been resolved.
- Snoqualmie – Remote location. Can share with North Bend.
- SPD – Two units designated for precincts, one north and one south.
- UWPD - UWPD's request for a Live Scan was previously denied due to lack of funding to support all requests for Live Scan Capture Stations.

Actual location of the units will be reviewed and established by the AAC based on need and estimated volume at time of implementation.

Impact on AFIS:
Depending on the number and type of Capture Stations purchased, it can increase the number of prints submitted to AFIS by 5,000 to 10,000 records a year. Impacts include an increase in liars identified prior to their release from custody, broader jurisdictional coverage, an increase in the number of prints submitted to the AFIS Database, and the potential for more latent cases solved against newly registered prints.

Other Impacts:
All county and city agencies have been surveyed on their need and willingness to participate in the King County Live Scan Program. This proposal would close existing gaps in services where Live Scan is not available to agencies for capturing criminal prints.

Timeline:
Two Capture Stations would be purchased and deployed in 2007 and three in 2008. Capture Stations would have end-of-life refreshment in 2014 and 2015.

Cost Estimates and Assumptions:

The costs are based on an informal estimate provided by the Live Scan vendor for five additional criminal units. Annual maintenance fees to maintain 24/7 or 9/5 service, depending on the location and volume of the capture stations, are included. The units should also be considered for end-of-life replacement approximately seven years from the date of purchase.

Palm Activation with Minimum Master Card Conversion
(Dollars in thousands)

6-Year Cost:	$1,071	Timeframe	2007 - 2008
TSC Category	2	AAC Funded Priority	YES

Program Description and Need:
Enable the AFIS Database to electronically store and search palm prints, and convert approximately 400,000 existing primary inked palm print cards to electronic versions. Convert only the primary or Master Palm Print Card for each individual who has been palm printed.

The Palm AFIS implementation is dependent on the installation of a New Generation AFIS. The Live Scan replacement proposal is also interrelated, in that Live Scan Capture Stations will serve as the main point of input for Palm AFIS.

Impact on AFIS:
The AFIS Ten-Print and Latent Databases contain only the first joint of the finger. It is estimated that approximately 30-35% of the latent prints found at crime scenes are from palms or other areas of the finger. With the capability to store full-hand prints and to match latent prints against them, the number of latent hits would increase, solving more crimes.

Other Impacts:
Implementation of a Palm AFIS would result in additional latent hits. The police departments within King County will experience an increase in hits, and therefore solve crimes that otherwise may have gone unsolved.

Timeline:
Palm AFIS would be an extension of the New Generation AFIS Project, which is scheduled to begin immediately upon voter approval of the AFIS Levy and the 2007 budget approval process. It is estimated to take approximately two years to complete.

Cost Estimates and Assumptions:
The costs are based on the midpoint of estimates received from two AFIS vendors. The estimate includes card conversion of 400,000 Master Palm Cards, additional storage, matching power, and maintenance required for Palm AFIS implementation, and a 10% contingency reserve on all non-labor elements. The estimate assumes refreshment in 2014.

Comparison with Other Jurisdictions:
Pierce County Sheriff's Office

- Palm AFIS went online in December 2004 with no conversion (zero database - day forward input of new records)
- Palm database has grown to 50,000 – masters only (no duplicates, retains best quality)

- PCSO estimates an overall palm hit rate of 3-5%, but attributes low numbers to the fact that they had no initial conversion and are operating off of a very small database

Source: Alan Johnson, Lead Forensic Technician

Note: There are no other existing Palm AFIS capabilities in the State of Washington for peer review, although Snohomish County does have a current bid for a Palm AFIS scheduled to close on February 14, 2006. This will be Snohomish County's first AFIS system (finger and palm), and is being implemented on a much smaller scale than what is typical for a large metropolitan area, making it of limited value for comparison.

California Department of Justice

- Palm AFIS went online in September 2003 with a conversion of 200,000 master cards only (no duplicates)
- Palm database has grown to 800,000 in two years, largely due to a California Initiative requiring palm prints and DNA collection on all felony charges (currently receiving over 70,000 electronic palms per month)
- CAL DOJ is not able to provide a percent hit rate, but states that they have made over 500 palm hits in the last two years, and were excited to note that many of those were on old "cold cases"

Source: Gordon Lowe, Manager for the California Automated Palm Print System

Indianapolis Police Department

- Palm AFIS went online in June 2003 with a conversion of 15,000 master cards only (no duplicates)
- Indianapolis had close to 200,000 cards on file, but did not convert them all due to cost
- Palm database has now grown to approximately 100,000 records
- Indianapolis has made 398 latent palm hits since implementation. In the same period of time they made 1,251 latent finger hits, which meant palm hits accounted for 25% of the total latent hits

Source: Mike Knapp, Latent Supervisor

San Francisco Police Department/Sheriff (Shared)

- Palm AFIS went online in February 2002 with a conversion of 150,000 master cards only (no duplicates)
- Palm database has grown by approximately 40,000 new records a year since implementation
- SFPD estimates an overall palm hit rate of 23%

Source: Mike Gaynor, Homicide Detective and Former AFIS Project Manager

Los Angeles Police Department/Sheriff (Shared)

- Palm AFIS went online in October 2003 with a conversion of 250,000 cards, including duplicates, and then another 100,000 a year later. Receiving about 1,000 palms a day now from Live Scan

- LASD estimates an overall palm hit rate of 2%, but attribute the low number to the size of their database, the large number of "old" palms included that are less likely to hit, and the fact that their Palm AFIS does not have an unsolved latent database, so latent palm prints would have to be manually re-run as new subjects' palms are added to the database as they come in (which staffing levels do not allow)

Source: Lisa Jackson, Forensic Identification Specialist and Technical Lead

Conversion Cost Comparison:

Pierce County Sheriff's Office	No conversion
California Department of Justice	Approximately $3.50/card
Indianapolis Police Department	$4.50/card
San Francisco Police Department/Sheriff	$1.00/card
Los Angeles Police Department/Sheriff	$1.00/card

Two AFIS vendors (NEC and Cogent) stated that while $2 per card is a good estimated number, it is highly variable based on the number of demographic fields that must be manually entered for each card, and the amount of human intervention requested to adjust the alignment of images on the card. Both vendors also agreed that through a competitive Request for Purchase (RFP) process, it could be possible to go as low as $1 per card (or even 50 cents), but that $2 a card was a good average price for estimation.

Both vendors were asked why the cost was higher than a typical document archival process. One vendor cited the need to extract minutiae for the database searches, and the other added that the FBI certified equipment required for conversion was much more costly than a typical scanner. Both stated that there is a significant difference in the detail and image quality between a fingerprint image and a standard document that is being scanned for archive purposes.

Staffing to Support Palm Search Capabilities
(Dollars in thousands)

6-Year Cost:	$1,226	Timeframe	2009
TSC Category	2	AAC Funded Priority	YES

Program Description and Need:
Additional staffing is needed to support the implementation of Electronic Palm Storage and Searching capabilities. This will require more AFIS entry time, comparison time, and time in court. The King County Sheriff Office (KCSO0 Latent staff researched all 2005 case submittals for the KCSO, its Contract Cities, and Suburban Cities. It found 34% of all cases had latent finger and palm prints, and of those, 11% had palm prints only.

There are 1,933 remaining unidentified latent palm prints in those cases. AFIS management has created and tested detailed staffing models to determine levels of staffing required for projected workloads, based on timing of tasks and completed caseloads. Based on these models, three additional Latent Print Examiners (two at KCSO and one at SPD) will be required in 2009 to support the workload increases due to electronic palm capabilities.

Impact on AFIS:
The estimated increase in solved crimes due to Electronic Palm Storage and Search capabilities should be between 20–30%.

Timeline:
This staff would not be hired until the New Generation AFIS, and associated Palm Activation and Minimum Master Card Conversion were complete, which is projected for completion toward the end of 2008.

Cost Estimates and Assumptions:
This estimate is based on salary and benefit costs for three Latent Print Examiners. One-time employee start-up costs and ongoing training are included in the cost estimate. King County salaries and benefits are escalated according to the proforma and Current Expense Fund (CX) financial plan assumptions. Seattle Police Department costs assume a 3% annual increase in salaries and a 7% annual increase in benefits.

Court Identification Feasibility Study
(Dollars in thousands)

6-Year Cost:	$120	Timeframe	2008 - 2009
TSC Category	3	AAC Funded Priority	YES

Program Description and Need:
Conduct a Court Identification Feasibility Study to analyze and make recommendations on the concept of taking fingerprints in court, for three purposes:

1. To ensure proper identification of the offender through fingerprints.
2. To add his/her prints to the AFIS Database for future ten-print and latent print matching and, therefore, assist in solving crimes and providing verification in cases of alleged identity theft.
3. To pass on the arrest information electronically to WSP for addition to the individual's rap sheet.

The Feasibility Study would research the costs and benefits to the regional criminal justice system of adding a court fingerprinting practice for misdemeanant or gross misdemeanant subjects cited and released in the field without being fingerprinted. The project manager will ask the consultant to report on three major pieces: the Feasibility Study, the Pilot Project, and the evaluation component.

Currently, in most limited jurisdiction courts in the county, only those defendants who are booked in relation to their offense are fingerprinted. Therefore, many offenders appearing in court have never been fingerprinted on the charges for which they are being adjudicated. Based on the outcome of the Court Identification Feasibility Study, implementation of fingerprinting in the limited jurisdiction courts would increase the quantity of prints in the AFIS Database. The court would have fewer identification challenges and better identity information on their defendants.

Impact on AFIS:
Fingerprinting in the limited jurisdiction courts could potentially provide upwards of 20,000 non-duplicated prints added to the AFIS Database on an annual basis. With these fingerprints added to the database, hit rates could increase and more 'liars' could be caught.

Other Impacts:
The outcome from the study will have policy and operational impact on the King County Courts. Representatives from both King County Courts and Washington State Patrol would be part of the Court Identification Feasibility Study and court policy makers would be part of the project steering committee. The Court Identification Feasibility Study would also review and evaluate the impact to the County's Wide-Area Network (WAN) of transmitting the additional fingerprint data.

Timeline:
The Court Identification Feasibility Study is estimated to take 12-24 months and would begin in 2008.

Cost Estimates and Assumptions:

The consultant cost for the Feasibility Study is estimated to be $100,000 over two years. A 20% contingency has been added to the estimate.

Mobile Identification Infrastructure (Including Three-Unit Vendor Proof of Concept)
(Dollars in thousands)

6-Year Cost:	$843	Timeframe	2008 - 2009
TSC Category	3	AAC Funded Priority	YES

Program Description and Need:
Mobile Identification is the rapid positive fingerprint identification of individuals, potentially in under three minutes, from wireless handheld devices. Significant changes are required at the Central Site to receive these fingerprints for identification: an upgraded AFIS Computer, an upgraded record management server, development of technical specifications for application software and integrations, the development of countywide standards for transaction type, image and data quality, and network security.

Mobile Identification capability is dependent on the implementation of a New Generation AFIS, and is enhanced by the Live Scan Status Quo Upgrade being considered for 2007. The connections are secured with FIPS-140 certified middleware Netmotion. This capability would complement the existing King County Sheriff's Office wireless implementation.

This project supports the necessary changes to the Central Site to allow the King County Regional AFIS Program to begin accepting records from mobile devices, and includes funding for three field units from different vendors to test the system to assure the proof of concept is sound.

Impact on AFIS:
Generally, unless a remote booking option is implemented, fingerprint images captured and searched are not retained in the AFIS Computer. However, positive fingerprint identification at the front-end of the process allows increased identification of potentially wanted or dangerous individuals and keeps officers on patrol, rather than forcing them to return to a precinct for subject identification.

Other Impacts:
Other law enforcement agencies would gain the benefit of access to King County Regional AFIS fingerprint data via Mobile Identification, allowing the officers to focus time in the community instead of at the precincts. It is possible that a system could be devised to link verified identifiers to citations, which would assist the courts and prosecutors with cases. County and Cities have been notified via Regional AFIS User Forums, Regional Auto Theft Initiative Committee Meetings, and ongoing presentations.

Timeline:
This project would not begin until Central Site Live Scan equipment has been upgraded in 2007 and until the Regional AFIS Program has installed a New Generation AFIS with an option for the wireless Mobile Identification capability, which is projected for completion toward the end of 2008.

Cost Estimates and Assumptions:

This estimate is based on informal vendor estimates to prepare Central Site equipment and includes licensing, maintenance, software, customizations and integrations, three field units for proof of concept testing, and a 10% contingency on all non-labor elements. A .67 FTE LAN Administrator is included to assist with the increased workload. This estimate does not include the cellular service to connect to the Central Site or ongoing maintenance for units after the initial testing phase.

Workload Driven Staffing
(Dollars in thousands)

6-Year Cost:	$954	Timeframe	2009 - 2012
TSC Category	2	AAC Funded Priority	YES

Program Description and Need:
This proposal requests the staffing levels required to maintain status quo activities with the expected workload increase in volume of fingerprints and latent crime scene evidence. AFIS management has created and tested detailed staffing models to determine levels of staffing required for projected workloads, based on timing of tasks and completed caseloads. Two different categories of staffing models are used – one for the Jail Identification and Ten-Print Units based on timed activities and a projected 1% annual volume growth in fingerprints, and a different staffing model for the Latent Print Units based on incoming caseload and completed cases. The process for each of these staffing models is briefly described below.

Jail Identification and Ten-Print Staffing Models

- Time the tasks done by Identification Technicians and Sheriff's Data Specialists in each of the Jail Identification Unit (1) and the Ten-Print Units (2) to determine average times to perform job functions, such as: fingerprinting subjects booked into jail using Live Scan Capture Stations; photographing subjects with the C.R.I.M.E.S Capture Station, searching prints against the AFIS Database; verifying identifications; editing and transmitting arrest information to WSP for rap sheet update and subsequent transmission to FBI; and performing quality control measures.
- Allow for a 1% increase in volume growth annually; multiply times for tasks by the number of estimated occurrences per year to calculate the total number of minutes to complete the tasks in a year.
- Estimate the number of minutes available per employee per year, accounting for average vacation, sick leave, holidays, etc. in the year.
- Divide the total number of minutes required to complete work in a year by the total available minutes per employee per year to calculate the number of FTEs required to complete the workload.

Latent Unit Staffing Models

- Document the number of incoming crime scene latent cases per year for the past four years (SPD) or six years (KCSO) to determine the average increase in cases per year.
- Apply the average increase in incoming cases (1.8% for KCSO and 2.3% for SPD) to determine projected caseload per year over a ten-year period.
- Record the number of completed cases per Latent Print Unit (SPD, KCSO) per year. Divide by the number of Latent Print Examiners (LPE) working in each Unit to get the number of completed cases per LPE. The average over the last two to four years is 416 for SPD and 378 for KCSO.
- Divide the projected caseload by the average completed caseload per LPE to

obtain the number of LPE FTEs needed per year.

Impact on AFIS:
Additional Identification Technicians and support staff will be needed in the Ten-Print Units to capture and identify an increasing number of fingerprints in a 24/7 operation, and to assist in latent print processing. The Latent Print Units currently carry backlogs of latent cases every year. On average, the number of incoming cases increases 1.8%-2.3% per year. Without the support staff to work the growing number of incoming crime scene latent cases and the backlog each year, these backlogs will grow larger every year.

Timeline, Cost Estimates and Assumptions:
Over a six-year period, four additional FTEs are requested to continue status quo activities with an increased workload. One-time employee start-up costs and ongoing training are included in the cost estimate. King County salaries and benefits are escalated according to the proforma and CX financial plan assumptions. SPD costs assume a 3% annual increase in salaries and a 7% annual increase in benefits. This cost estimate does not include positions tied to any other decision package.

AFIS Photographers for the Photo Labs
(Dollars in thousands)

6-Year Cost:	$954	Timeframe	2007
TSC Category	3	AAC Funded Priority	YES

Program Description and Need:
Presently, SPD and KCSO Latent Print Examiners rely on non-AFIS Photo Unit personnel to perform forensic-level photography and photographic preservation of latent images. The primary responsibility of the Photo Units is to provide photographic support for their entire organization. This means that AFIS is secondary to the general operation of the Photo Lab. Often this arrangement causes a delay in preserving and processing the latent images, hindering the identification process. By providing the Latent Print Examiners with a dedicated full-time forensic-level photographer, all latent images will be processed in a timely matter. This will reduce the occurrence of the latent images fading prior to preservation, and allow more images to be searched for AFIS hits.

Fund two full-time Senior Photographer positions, one position each for the Seattle Police Department and the King County Sheriff's Office. The positions will provide forensic level photography and photographic processing of developed latent images. In addition, the Senior Photographers will be available for on-call response to assist the Latent Print Examiners in the preservation of evidence at crime scenes. The Photographic Supervisors for each department will manage the positions. Creating this type of report structure assures that AFIS photography maintains 24/7 call-out coverage.

Impacts on AFIS:
More prints will be submitted into the AFIS Database due to the fact that the images will be preserved and/or processed in a matter of hours, verses the current wait of up to 30 days. This will eliminate the potential for the latent images to fade prior to preservation. The success of this program should be measured by a higher hit ratio, and more submissions into the AFIS Database. Additionally, the new positions will allow for the time-critical expedited processing of domestic violence cases, court cases, and latent cases to be worked concurrently, rather than consecutively.

Other Impacts:
The Latent Print and Photo Units have implemented procedures to shorten the length of time between chemical processing and photographic preservation. For instance, ninhydrin-processed images are no longer photographed using black and white film and filters but are digitized using a flatbed scanner process. However, due to prosecutorial concerns over digital versus conventional photography, photographers shoot a film based overall of the item. The overall holds enough clarity to answer rebuttal over the digital procedure. Additional procedures to shoot latent photography in 35mm film format and scanning images to a CD, allows immediate searchable prints into the AFIS Database.

Timeline:

The hiring will begin in 2007. The new photographers will undergo several months of technical and procedural training.

Cost Estimates and Assumptions:
The estimate is based on salary, benefit, and training costs for two photographer positions. Estimates also include one-time startup costs for furniture and equipment.

Court Identification Pilot Project

(Dollars in thousands)

6-Year Cost:	$197	Timeframe	2010 - 2011
TSC Category	4	AAC Funded Priority	YES

Program Description and Need:

Currently, in most limited jurisdiction courts in King County, only those defendants who are booked in relation to their offense are fingerprinted. Therefore, many offenders appearing in court have never been fingerprinted on the charges for which they are being adjudicated. All charge information is currently updated to a name-only based system, without positive fingerprint identification. As a result, citizens are incorrectly issued court summons then appear at the Regional King County AFIS Ten-Print Unit, seeking assistance in clearing their names.

This project would fund a Court Identification Pilot Project conducted at three locations: one at the Municipal Court level, one at the District Court level, and one at the Superior Court level, based on the analysis and recommendations from the Court Identification Feasibility Study. This Pilot Project would be further defined after the feasibility analysis has been completed, so that recommendations can guide the project. The project manager will ask the consultant to report on three major pieces: the Feasibility Study, the Pilot Project, and the evaluation component.

Impact on AFIS:

Depending on the outcome of the Court Identification Feasibility Study, court fingerprinting could increase the ability of the Regional AFIS Program to capture as many prints as legally permissible in the AFIS Database. Implementation of fingerprinting in the limited jurisdiction courts would increase the quantity of prints in the AFIS Database. With these fingerprints added to the database, hit rates could increase and more 'liars' could be caught.

Other Impacts:

The Pilot Project would be designed to integrate into the New Generation AFIS database. Representatives from both the King County Courts and Washington State Patrol would be part of the feasibility study and court policy makers would be part of the project steering committee. The Feasibility Study would also review and evaluate the impact to the County's Wide-Area Network (WAN) of transmitting the additional fingerprint data.

Timeline:

The Feasibility Study is scheduled to start in 2008 and would take 12-24 months. Following that, the Pilot Project is estimated to take 12-24 months in 2010-2011.

Cost Estimates and Assumptions:

Costs include the purchase, installation, and maintenance of hardware in three pilot court sites, and an evaluation of the Pilot Project after completion. A .33 FTE LAN Administrator position has been included to provide support during the Pilot Project.

Mobile Identification Pilot Project
(Dollars in thousands)

6-Year Cost:	$72	Timeframe	2009
TSC Category	5[23]	AAC Funded Priority	YES

Program Description and Need:
Mobile Identification can support rapid positive fingerprint identification of individuals, potentially in under three minutes, from wireless handheld devices,. It would complement the existing King County Sheriff's Office wireless implementation. Cellular carriers Sprint and Verizon provide the existing KCSO wireless infrastructure

This Pilot Project supports purchasing 10 field units to enable local law enforcement agencies to test the technology for utilization in their jurisdictions. It is assumed that after the initial pilot phase agencies will purchase and maintain their own field units.

The Pilot Project is dependent on the Central Site modifications to be completed under the Mobile Identification Central Site project, which is dependent on the implementation of a New Generation AFIS, and is enhanced by the Live Scan Status Quo Upgrade being considered for 2007.

Impact on AFIS:
Generally, unless a remote booking option is implemented, fingerprint images captured and searched are not retained in the AFIS Computer. However, positive fingerprint identification at the front-end of the process allows increased identification of potentially wanted or dangerous individuals and keeps officers on patrol, rather than forcing them to return to a precinct for subject identification.

Other Impacts:
Other law enforcement agencies would gain the benefit of access to King County Regional AFIS fingerprint data via Mobile Identification, allowing the officers to focus time in the community instead of at the precincts. It is possible that a system could be devised to link verified identifiers to citations, which would assist the courts and prosecutors with cases. County and Cities have been notified via Regional AFIS User Forums, Regional Auto Theft Initiative Committee Meetings, and ongoing presentations.

Timeline:
This project would not begin until Central Site Live Scan equipment has been upgraded in 2007, and until the Regional AFIS Program has installed a New Generation AFIS with an option for the Wireless Mobile Identification capability in 2008. The units would be

[23] The TSC reviewed the pilot project with an assumption of 50 units. The TSC felt strongly that (quoted from the Summary of Themes from TSC – see appendix _____): "Not certain of regional responsibility to fund this for local jurisdictions that want to use it. At 50 units, is it an implementation plan or a pilot program? Complex both technically and from a business perspective due to the variety of jurisdictions involved and their unique technical configurations." The AAC took their comments under advisement and as a result, reduced the pilot to 10 units.

purchased in 2009.

Cost Estimates and Assumptions:
This estimate is based on informal vendor estimates for ten units at $5000 each, as well as $820 per unit annual maintenance cost for one year. This estimate includes a 10% contingency on all non-labor elements and assumes that Law Enforcement Agencies will fund the wireless service costs for the units they are granted.

Complete Palm Card Conversion

(Dollars in thousands)

6-Year Cost:	$468	Timeframe	2007 - 2008
TSC Category	4	AAC Funded Priority	NO

Program Description and Need:

Convert the approximately 200,000 existing secondary inked palm print cards to electronic versions for searching and storage in the AFIS Database.

This completed conversion would only take place if a Palm AFIS were implemented. The Palm AFIS implementation is reliant on the installation of a New Generation AFIS.

Impact on AFIS:

Convert the existing 200,000 secondary inked palm print cards to electronic versions. While the primary cards will be converted during the Palm Activation, secondary cards also provide value. A latent print containing the ridge detail the size of a pencil eraser may be found at a crime scene. If the particular area corresponding to that ridge detail on the primary card were smudged, the match would be missed. With the registration of the additional cards, the chance of a hit would increase.

Other Impacts:

The conversion of the secondary palm print cards could increase latent hit rates. The police departments within King County will experience an increase in hits, and therefore solve crimes that otherwise may have gone unsolved.

Timeline:

The Completed Palm File Conversion would be an extension of the Palm Activation and New Generation AFIS Projects, which are scheduled to begin immediately upon voter approval of the AFIS Levy, and 2007 budget approval process. It is estimated to take approximately two years to complete.

Cost Estimates and Assumptions:

The midpoint of estimates received from two AFIS vendors was used. The estimate includes card conversion of 200,000 secondary palm cards at $2 per card, additional storage, matching power, maintenance required for Palm AFIS implementation, and a 10% contingency reserve on all non-labor elements.

Live Scan Applicant Units
(Dollars in thousands)

6-Year Cost:	$256	Timeframe	2009 - 2010
TSC Category	4	AAC Funded Priority	NO

Program Description and Need:
While surveying King County Law Enforcement agencies to identify potential gaps in criminal identification services, five current Live Scan sites expressed interest in acquiring a second Live Scan Capture Station for the purpose of applicant fingerprinting only. Although the existing Live Scan Capture Stations are capable of capturing both criminal and applicant records, at some sites the units are located in a secure area and agencies are not able to allow the public access for fingerprinting. At one site, access was not a problem, but it was felt that the volume of records could justify a second unit.

In response to this interest, a proposal was presented for the purchase and maintenance of up to seven additional Live Scan units for the purpose of applicant printing only. It was suggested that the proposed units be distributed based on the sites' potential volume of records and their access to other Live Scan units, which is the same criteria used when distributing units for criminal processing.

Impact on AFIS:
Implementing Live Scan Technology as a service for applicant printing could make processing faster, cleaner, and more efficient for individual agencies, and may provide for the addition of a small percentage of records to the AFIS Database. However, failing to fund this improvement at a regional level through the levy has minimal effect on the Regional AFIS Program's primary goal of providing criminal identification services for improved public safety.

Other Impacts:
All county and city agencies have been surveyed on their need and willingness to participate in the King County Live Scan System.

Timeline:
The seven Applicant Live Scan Units would be purchased and deployed in 2009 and 2010, with refreshment 2014 and 2015.

Cost Estimates and Assumptions:
The costs are based on an informal estimate provided by the Live Scan vendor for seven additional applicant units, and for the annual maintenance fee to maintain 9/5 service. The Capture Stations should also be considered for end-of-life replacement approximately seven years from the date of purchase.

I: FINANCIAL EXPENDITURE DETAILS AND FINANCIAL PLAN

The chart below shows the total of the expenditures by year and item:

Costs in 000's	2007	2008	2009	2010	2011	2012	6 Year Total
New Generation AFIS	$ 297	$ 3,053	$ 1,212	$ 1,022	$ 122	$ 129	**$ 5,835**
Live Scan Upgrade to High Definition	-	318	20	21	22	23	**404**
Live Scan Increase - Criminal Units	67	127	24	25	26	28	**297**
Palm Activation & Minimum Master Card Conversion	-	1,012	13	14	15	17	**1,071**
Staffing to Support Palm Search Capabilities	-	-	293	298	311	324	**1,226**
Court Identification Feasibility Study	-	48	72	-	-	-	**120**
Court Identification Pilot	-	-	-	102	51	44	**197**
Mobile ID - Central Site	-	76	394	118	124	131	**843**
Mobile ID - Pilots	-	-	63	9	-	-	**72**
Workload Based Staffing	-	-	131	205	303	315	**954**
AFIS Photographers	146	147	156	162	168	175	**954**
Total Initiative 2007-2012	**$ 510**	**$ 4,781**	**$ 2,378**	**$ 1,976**	**$ 1,142**	**$ 1,186**	**$ 11,973**
Status Quo	14,368	13,917	14,540	15,130	15,911	16,585	90,451
Total Forecasted Expenditures 2007-2012	**$ 14,878**	**$ 18,698**	**$ 16,918**	**$ 17,106**	**$ 17,053**	**$ 17,771**	**$ 102,424**

King County

Financial Plan Forecast – Revenues, Expenditures, and Fund Balance Forecasted through 2012

2001-2005 Actual Revenue and Expenditures; 2006 Revenue Actual, Expenditures Adopted Budget

2007-2012 Proposed Statutory Rate of 5.25 Cents Per $1000/AV

	Statutory Rate: 5.784 cents / $1,000 AV							Proposed Statutory Rate: 5.25 cents / $1,000 AV						
	2001 Actual	**2002 Actual**	**2003 Actual**	**2004 Actual**	**2005 Projected**	**2006 Adopted**	**2001-2006 Total**	**2007 Projected**	**2008 Projected**	**2009 Projected**	**2010 Projected**	**2011 Projected**	**2012 Projected**	**2007-2012 Total**
Beginning Fund Balance	**$ 14,820**	**$ 16,269**	**$ 17,859**	**$ 16,383**	**$ 17,572**	**$ 15,281**		**$ 2,981**	**$ 3,985**	**$ 1,624**	**$ 1,445**	**$ 1,563**	**$ 2,265**	
Revenues														
AFIS Levy	$ 10,833	$ 11,211	$ 10,817	$ 11,883	$ 12,216	$ -	$ 56,960	$ 15,577	$ 16,035	$ 16,506	$ 16,991	$ 17,491	$ 18,005	$ 100,605
Other Revenues	$ 824	$ 640	$ 254	$ 258	$ 388	$ 312	$ 2,676	$ 170	$ 144	$ 78	$ 77	$ 98	$ 130	$ 697
Total Revenues	**$ 11,657**	**$ 11,851**	**$ 11,071**	**$ 12,141**	**$ 12,604**	**$ 312**	**$ 59,636**	**$ 15,747**	**$ 16,179**	**$ 16,584**	**$ 17,068**	**$ 17,589**	**$ 18,135**	**$ 101,302**
Expenditures														
Salaries & Benefits	$ 4,716	$ 5,163	$ 5,440	$ 5,807	$ 5,999	$ 7,230	$ 34,355	$ 7,942	$ 8,411	$ 8,998	$ 9,508	$ 10,046	$ 10,532	$ 55,437
Supplies & Services	$ 1,704	$ 1,538	$ 4,843	$ 2,808	$ 6,474	$ 2,236	$ 19,603	$ 2,864	$ 4,198	$ 3,416	$ 2,997	$ 3,220	$ 3,306	$ 20,001
City of Seattle	$ 2,194	$ 2,178	$ 2,161	$ 2,262	$ -	$ 2,708	$ 11,503	$ 2,981	$ 3,100	$ 3,316	$ 3,443	$ 3,575	$ 3,715	$ 20,130
Capital	$ 1,569	$ 43	$ 102	$ 75	$ 2,418	$ 438	$ 4,645	$ 1,091	$ 2,989	$ 1,188	$ 1,158	$ 212	$ 218	$ 6,856
Other	$ 154	$ 1,375	$ 1	$ -	$ 4	$ -	$ 1,534	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expenditures	**$ 10,337**	**$ 10,297**	**$ 12,547**	**$ 10,952**	**$ 14,895**	**$ 12,612**	**$ 71,640**	**$ 14,878**	**$ 18,698**	**$ 16,918**	**$ 17,106**	**$ 17,053**	**$ 17,771**	**$ 102,424**
Underexpenditure [1]								$ 135	$ 158	$ 155	$ 156	$ 166	$ 173	
Adjustments	$ 129	$ 36					$ 165							$ -
Ending Fund Balance	**$ 16,269**	**$ 17,859**	**$ 16,383**	**$ 17,572**	**$ 15,281**	**$ 2,981**		**$ 3,985**	**$ 1,624**	**$ 1,445**	**$ 1,563**	**$ 2,265**	**$ 2,802**	
Reserves & Designations														
Capital Equipment Reserve [2]								$ 3,000	$ 500	$ -	$ 500	$ 1,000	$ 1,500	
Total Reserves & Designations								**$ 3,000**	**$ 500**	**$ -**	**$ 500**	**$ 1,000**	**$ 1,500**	
Undesignated Fund Balance								**$ 985**	**$ 1,124**	**$ 1,445**	**$ 1,063**	**$ 1,265**	**$ 1,302**	
Target Ending Fund Balance [3]					$ 800			$ 935	$ 962	$ 990	$ 1,019	$ 1,049	$ 1,080	
Levy Rate	5.784	5.348	4.836	5.052	4.933	0.000		5.25	5.011	4.773	4.582	4.398	4.222	
Footnotes:														
This financial plan assumes a cash basis. As capital expenditures are made, the appropriate debt service mechanisms may be used.														
[1] 1.25% of Operating Expenses														
[2] Reserve to replace capital equipment in future years. The reserve is drawn down in 2008 and 2009 as capital expenditures are made.														
[3] 6% of Levy Revenues														